

## ABSTRACT

Disclosed is a process for the manufacture of an  
5 elastic polyurethane fiber, including mixing one component  
selected from among polystyrene polymers or polystyrene  
copolymers having a number average molecular weight of  
50,000-500,000 with polyurethane having a number average  
molecular weight of 15,000-100,000, to prepare a polymer  
10 mixture, which is then spun. The polyurethane elastic fiber  
made by the method is also provided, which is greatly  
increased in heat set properties, with a very low rate of  
change of fundamental properties as the results compared  
with conventional elastic polyurethane fibers. Hence, the  
15 elastic polyurethane fiber can be directly applied for  
preparation of end products requiring superior heat set  
properties with no change of conventional conditions of the  
process.